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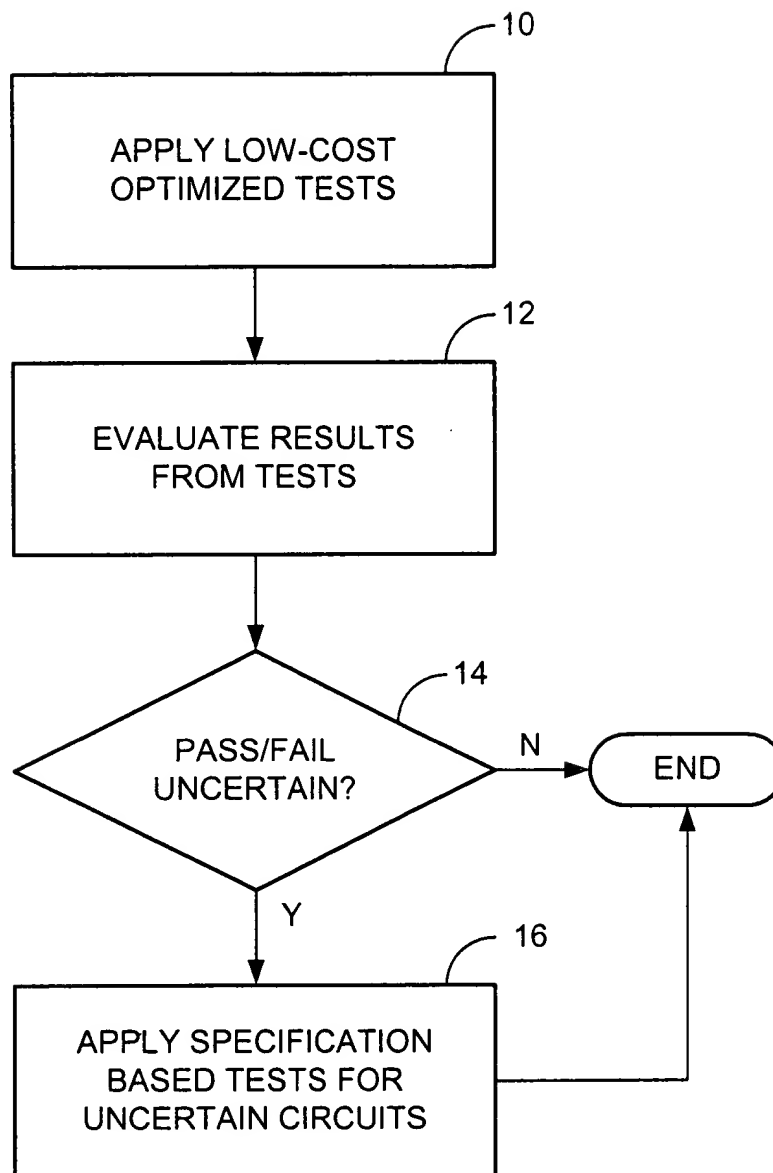


FIG. 1

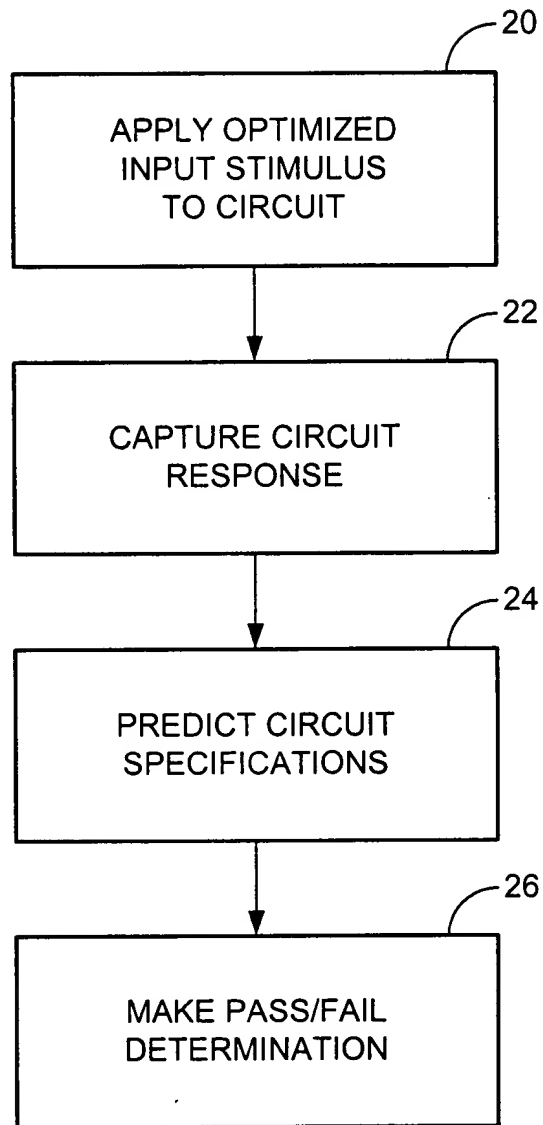
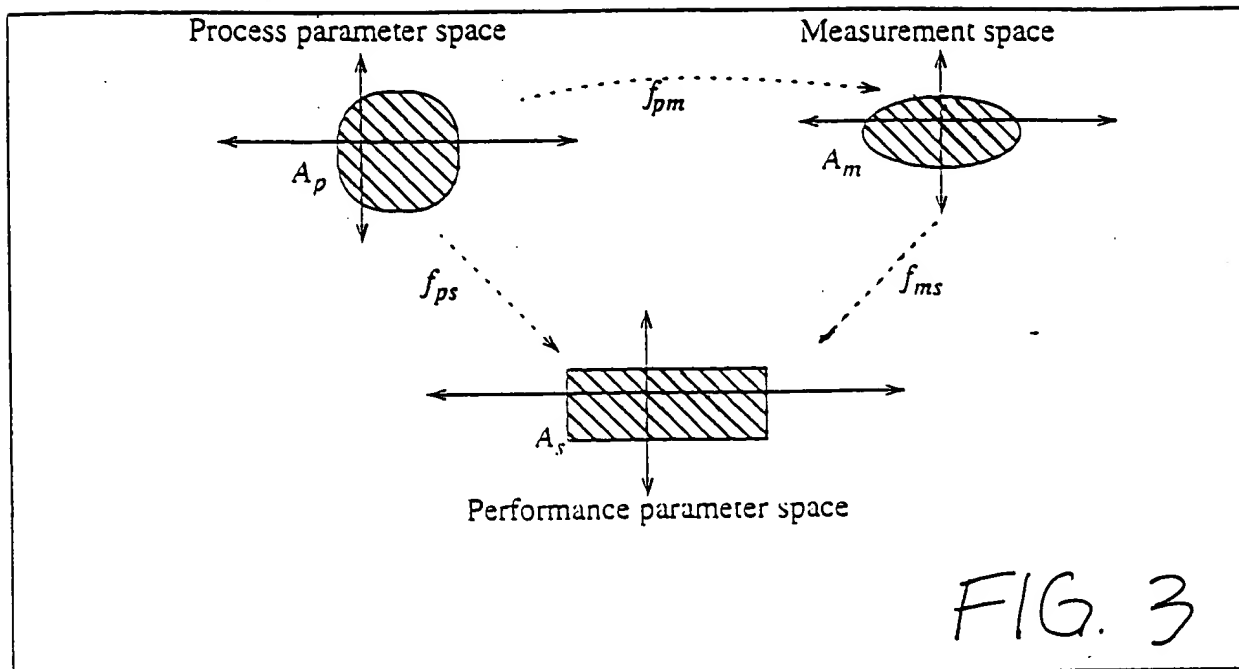


FIG. 2



```
graph TD; 40[40. APPLY INPUT STIMULUS TO CIRCUIT] --> 42[42. MEASURE RESPONSE]; 42 --> 44[44. INPUT RESPONSE INTO MAPPING FUNCTION]; 44 --> 46[46. EVALUATE FUNCTION WITH RESPECT TO EACH SPECIFICATION]; 46 --> 48[48. MAKE PASS/FAIL DETERMINATION];
```

400

40. APPLY INPUT STIMULUS TO CIRCUIT

42. MEASURE RESPONSE

44. INPUT RESPONSE INTO MAPPING FUNCTION

46. EVALUATE FUNCTION WITH RESPECT TO EACH SPECIFICATION

48. MAKE PASS/FAIL DETERMINATION

FIG. 4

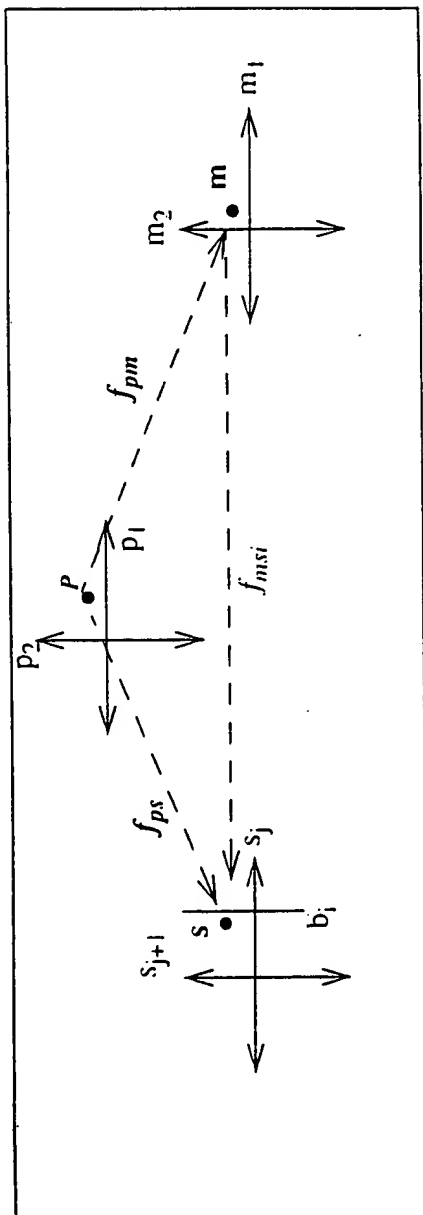


FIG. 5

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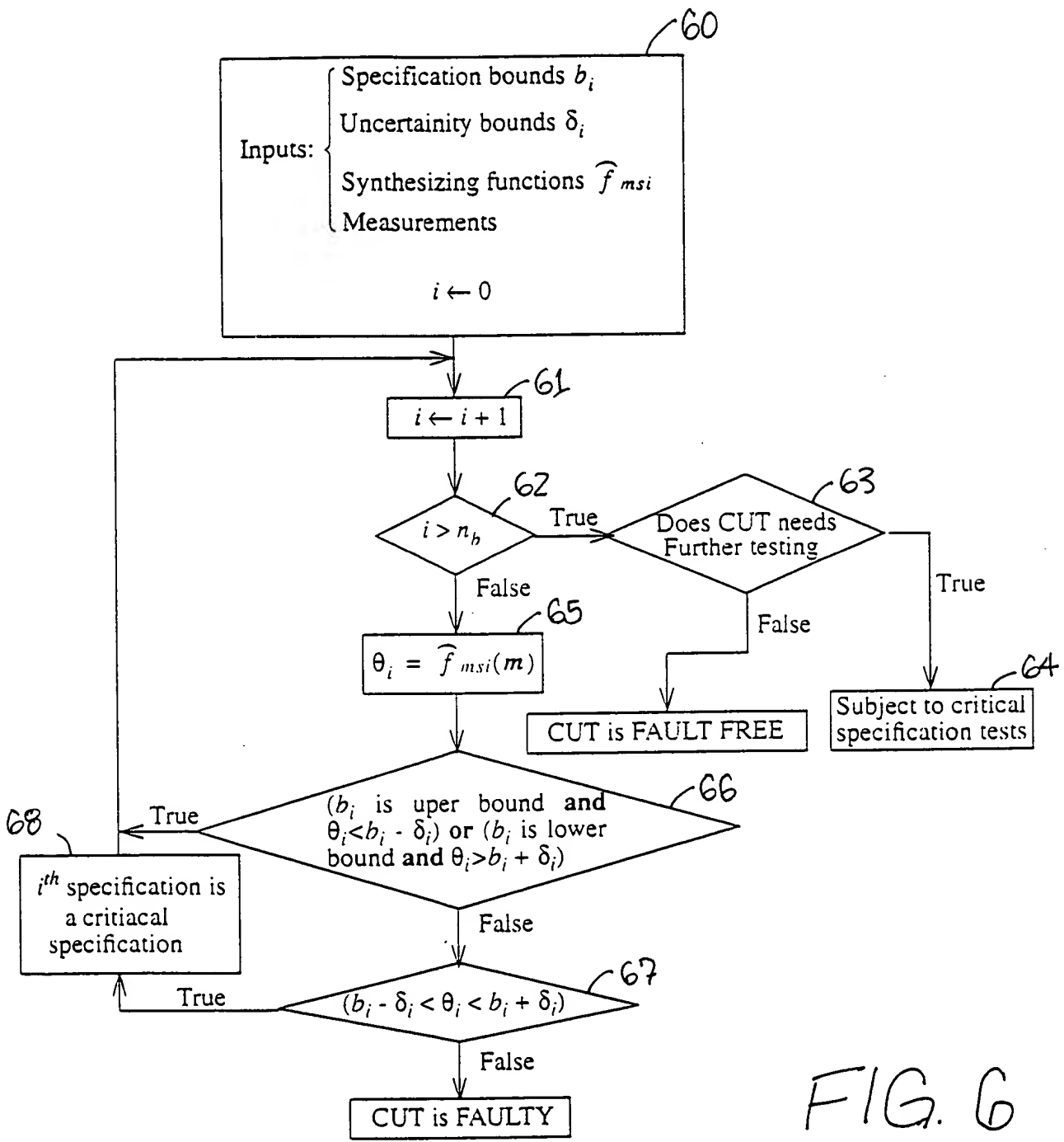


FIG. 6

Procedure OrderMeasurements

```
01 for each  $i^{th}$  single ended specification
02   for each measurement
03     remove the measurement from the list of independent variable
04     derive the synthesizing function using MARS. Use the training set generated by
       GenerateTrainSet to train MARS
05     Calculate the variance  $\sigma_{ei}^2$ .
06   end for
07   Order the measurements in the ascending order of  $\sigma_{ei}^2$ .
08 end for
```

Procedure SelectMeasurements

```
01 for each single ended specification
02   Selected measurements =  $\Phi$ 
03   repeat
04     Add the measurement with lowest  $\sigma_{ei}^2$  to the set of selected measurements.
       Use the ordered list of measurements generated by OrderMeasurements
05     Derive the synthesizing function with the selected set of measurements
06     Calculate the variance  $\sigma_{ei}^2$ 
07   until  $\sigma_{ei}^2$  start increasing.
08 end for
```

FIG. 8

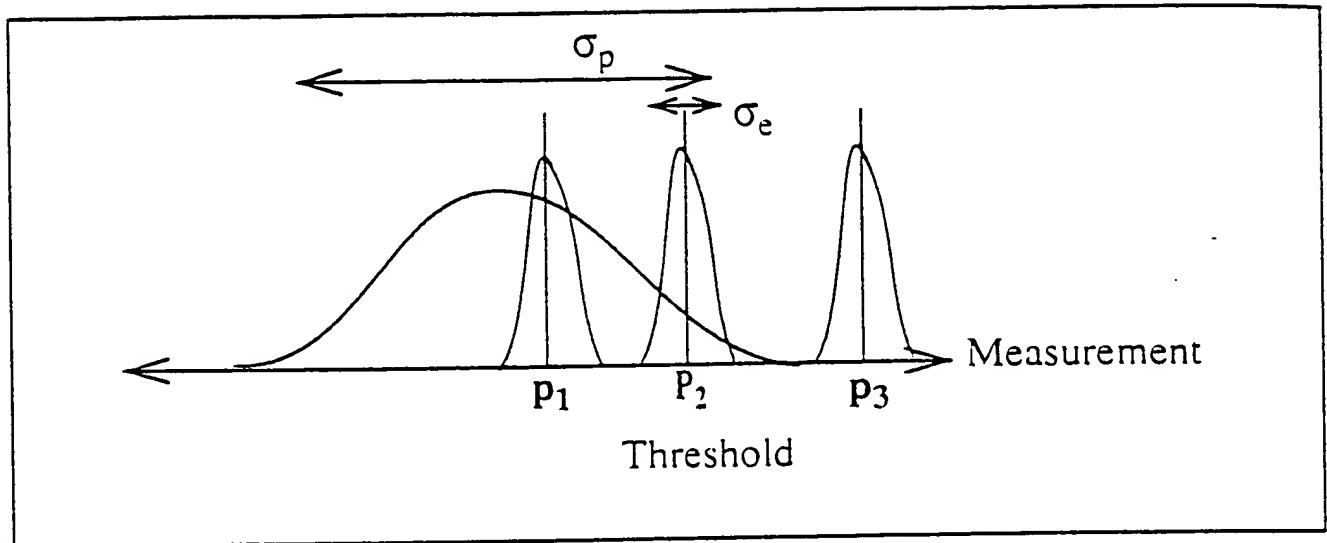


FIG. 9

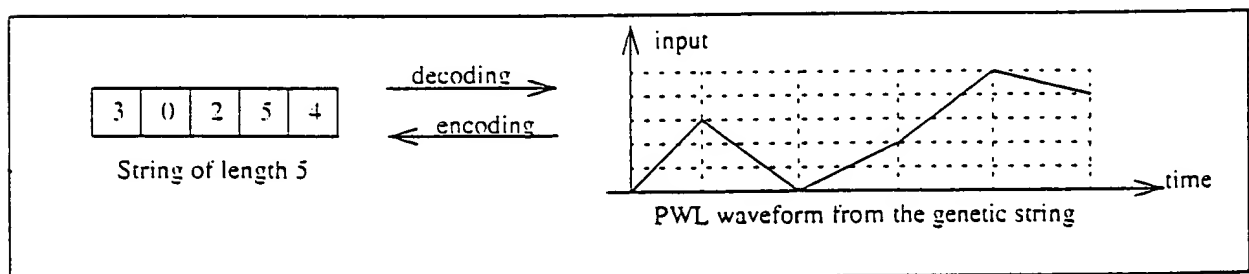


FIG. 10

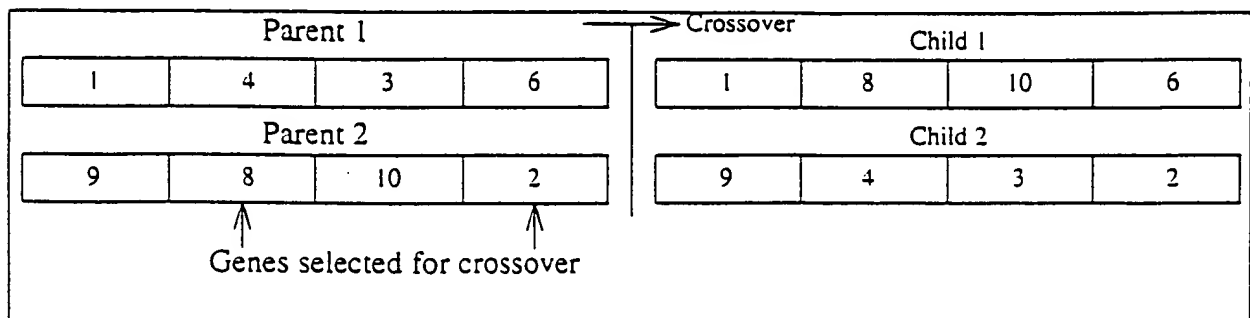


FIG. 11